E-cadherin Monoclonal Antibody (4A2C7)

Product Details	
Size	100 µg
Species	Human
Published Species	Dog, Avian, Rat, Pig, Hamster, Human, Mouse
Expression System	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	4A2C7
Conjugate	Unconjugated
Immunogen	Recombinant MBP fusion protein corresponding to the cytoplasmic domain of human E-cadherin
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage Conditions	-20°C
RRID	AB_2533118

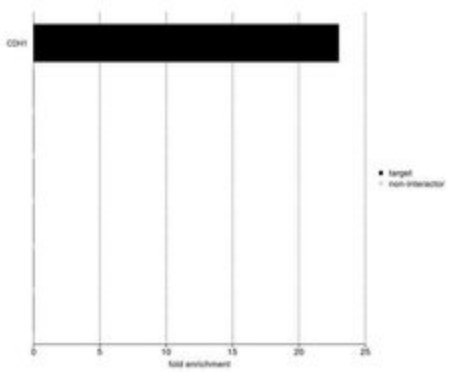
Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	2-10 µg/mL	29 Publications
Immunoprecipitation (IP)	2-5 µg	-
Western Blot (WB)	1 µg/mL	24 Publications
ChIP assay (ChIP)	-	1 Publication
Immunocytochemistry (ICC)	-	16 Publications
Immunofluorescence (IF)	-	7 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	4 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	56 Publications
Miscellaneous PubMed (Misc)	-	59 Publications

Product Specific Information

This antibody is specific for E-cadherin but does show some minor cross-reactivity with P-cadherin.

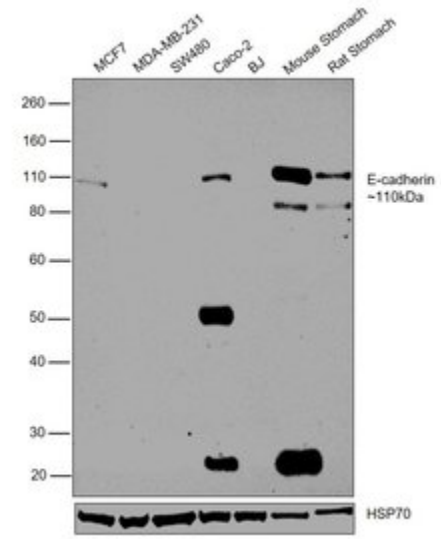
Formalin-fixed, paraffin embedded tissue sections required a Heat Induced Epitope Retrieval (HIER) step prior to staining with this antibody in an IHC application.

Advanced Verification Data

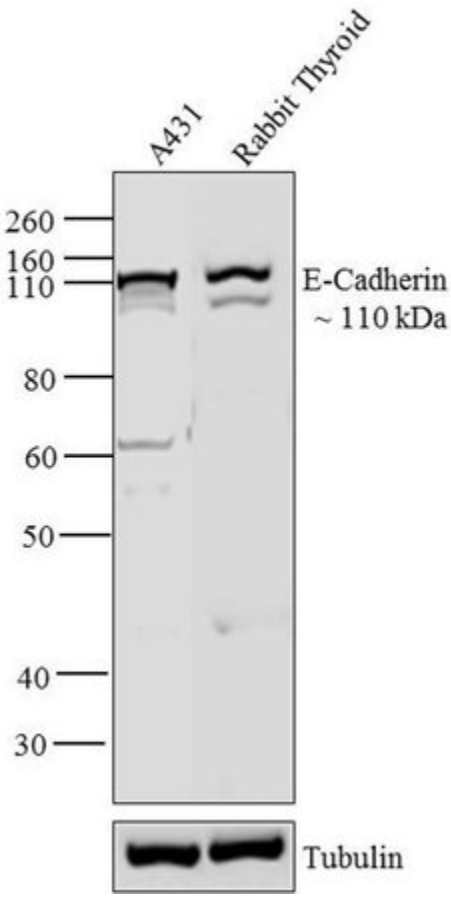


E-cadherin Antibody (33-4000)
IP-MS enrichment of CDH1 (LFQ intensity): CDH1 was enriched 23-fold from MCF7 lysate compared to background proteins, using the optimized IP-MS workflow with Pierce MS-Compatible Magnetic IP Kit protein A/G (Product # 90409) and CDH1 antibody (Product # 33-4000). The STRING database (www.string-db.org) was used to identify the protein interactor list. See more information on IP-MS verification of antibody selectivity. IP-MS validation info.

Product Images For E-cadherin Monoclonal Antibody (4A2C7)



E-cadherin Antibody (33-4000) in WB
Western blot was performed using Anti-E-cadherin Monoclonal Antibody (4A2C7) (Product # 33-4000) and a 110kDa band corresponding to E-cadherin was observed across in all tested cell lines and tissues, except MDA-MB-231, SW480 and BJ. Whole cell extracts (30 µg lysate) of MCF7 (Lane 1), MDA-MB-231 (Lane 2), SW480 (Lane 3), Caco-2 (Lane 4), BJ (Lane 5), Mouse Stomach (Lane 6), Rat Stomach (Lane 7) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1 µg/mL) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177,1:4000) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using SuperSignal™ West Dura Extended Duration Substrate (Product # 34076).The band at ~80kDa in Mouse stomach and Rat stomach corresponds to proteolytic cleavage products of E-cadherin.



E-cadherin Antibody (33-4000) in WB
Western blot analysis of E-Cadherin was performed by loading 20 µg of A431 (lane1) and Rat Thyroid lysate (lane2) lysates using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX), XCell SureLock Electrophoresis System (Product # EI0002), Novex® Sharp Pre-Stained Protein Standard (LC5800). Proteins were transferred to a PVDF membrane and blocked with 5 % skim milk for 1 hour at room temperature. E-Cadherin was detected at ~110 kDa using E-Cadherin Mouse Monoclonal Antibody (Product # 33-4000) at 1-3 µg/mL in 2.5 % skim milk at 4°C overnight on a rocking platform. Goat Anti-Mouse IgG - HRP Secondary Antibody (Product # 62-6520) at 1:4000 dilution was used and chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).

196 References

Immunocytochemistry (16)

Frontiers in oncology

Activation of Epithelial-Mesenchymal Transition and Altered -Catenin Signaling in a Novel Indian Colorectal Carcinoma Cell Line.

"33-4000 was used in Immunocytochemistry-immunoflourescence to characterise the pathological alterations in the MBC02 cell line established from an Indian colorectal cancer patient."

Authors: Mylavarapu S,Kumar H,Kumari S,Sravanthi LS,Jain M,Basu A,Biswas M,Mylavarapu SVS,Das A,Roy M

Species
Human

Dilution
1:200

Year
2020

Cellular and molecular gastroenterology and hepatology

Paracrine Induction of Epithelial-Mesenchymal Transition Between Colorectal Cancer Cells and its Suppression by a p53/miR-192/215/NID1 Axis.

"33-4000 was used in Immunocytochemistry-immunoflourescence to analyse whether mesenchymal-like colorectal cancer cells promote the progression of epithelial-like CRC cells via paracrine mechanisms."

Authors: Rokavec M,Bouznad N,Hermeking H

Species
Human

Dilution
1:50

Year
2020

View more ICC references on thermofisher.com

Immunofluorescence (7)

Frontiers in oncology

Activation of Epithelial-Mesenchymal Transition and Altered -Catenin Signaling in a Novel Indian Colorectal Carcinoma Cell Line.

"33-4000 was used in Immunocytochemistry-immunoflourescence to characterise the pathological alterations in the MBC02 cell line established from an Indian colorectal cancer patient."

Authors: Mylavarapu S,Kumar H,Kumari S,Sravanthi LS,Jain M,Basu A,Biswas M,Mylavarapu SVS,Das A,Roy M

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WB (24) **IHC (29)** **IHC (P) (56)** **Misc (59)** **ChIP (1)** **IHC (F) (4)**